REMARKS/ARGUMENTS

Claims 1-30 are pending in the present application.

This Amendment is in response to the Office Action mailed April 4, 2006. In the Office Action, the Examiner rejected claims 1-3, 7-11, and 15 under 35 U.S.C. §102(e); and claims 4-5, 12-13, 16-20, 22-28, and 30 under 35 U.S.C. §103(a). In addition, the Examiner indicated allowable subject matter for claims 6, 14, 21, and 29 if they are rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have amended claims 1, 4-9, and 11-30. Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Claim Objections

The Examiner objects to claims 4, 12, 19, and 27 due to informalities. Applicants have amended claims 4, 12, 19, and 27 according to the Examiner's suggestions.

Applicants respectfully request that the Examiner withdraw the objection to claims 4, 12, 19, and 27.

Rejection Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-3, 7-11, and 15 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,799,162 issued to Goronzy et al. ("Goronzy"). Applicant respectfully traverses the rejection and contend that the Examiner has not met the burden of establishing a prima facie case of anticipation.

Goronzy discloses a semi-supervised speaker adaptation. A confidence measure is applied to a recognition result (Goronzy, col. 3, lines 50-51). The confidence measure can be used to compute a weight which determines the strength of adaptation (Goronzy, col. 4, lines 31-33).

Goronzy does not disclose, either expressly or inherently, (1) calculating estimated weights for identified errors in recognition of utterances; (2) marking sections of the utterances as being misrecognized and associating the estimated weights with the sections of the utterances; and (3) using the weighted sections of the utterances to convert a speaker independent model to a speaker dependent model.

Goronzy merely discloses calculating a confidence measure using extracted features including scores of the n-best recognition hypotheses, HMM state durations, etc., not using identified errors in recognition of utterances. Goronzy specifically discloses that no supervising user of fixed set of vocabulary for adaptation is necessary (Goronzy, col. 3, lines 19-20). Accordingly, Goronzy does not disclose or suggest "identified errors in recognition of utterances" as recited in claims 1 and 16, or "to form adaptation enrollment data" as recited in claims 8 and 23.

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Vergegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the...claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ 2d 1913, 1920 (Fed. Cir. 1989). Since the Examiner failed to show that Goronzy teaches or discloses any one of the above elements, the rejection under 35 U.S.C. §102 is improper.

Therefore, Applicants believe that independent claims 1, 8, 16, and 23, and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicants respectfully request the rejection under 35 U.S.C. §102(e) be withdrawn.

Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 4-5, 12-13, 16-20, 22-28, and 30 under 35 U.S.C. §103(a) as being unpatentable over <u>Goronzy</u> in view of U.S. Patent No. 6,253,181 issued to Junqua ("<u>Junqua</u>"). Applicants respectfully traverse the rejection and contend that the Examiner has not met the burden of establishing a prima facie case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim

Docket No: 042390.P8351 Page 9 of 12 TVN/tn

limitations. MPEP §2143, p. 2100-129 (8th Ed., Rev. 2, May 2004). Applicants respectfully contend that there is no suggestion or motivation to combine their teachings, and thus no prima facie case of obviousness has been established.

Goronzy discloses a semi-supervised speaker adaptation as discussed above.

Junqua discloses a speech recognition and teaching apparatus able to rapidly adapt to difficult speech of children and foreign speakers. A likelihood score ratio compares the likelihood score associated with correct recognition with the mean or average of the likelihood scores associated with incorrect recognition (Junqua, col. 4, lines 18-24). The ratio uses the Hidden Markov Model (HMM) (Junqua, col. 5, lines 35-45).

Goronzy and Junqua, taken alone or in any combination, do not disclose, suggest, or render obvious (1) calculating estimated weights for identified errors in recognition of utterances; (2) marking sections of the utterances as being misrecognized and associating the estimated weights with the sections of the utterances; (3) using the weighted sections of the utterances to convert a speaker independent model to a speaker dependent model; and (4) calculating the estimated weights comprises computing an average likelihood difference per frame and then computing a weight value by averaging the average likelihood difference over error words.

As discussed above in the §102 rejection, <u>Goronzy</u> does not disclose or suggest elements (1) - (3). Therefore, any combination of <u>Goronzy</u> with any other reference in rejecting claims 4-5, 12-13, 16-20, 22-28 and 30, is improper.

Furthermore, <u>Junqua</u> merely discloses the likelihood of observation given HMM model (<u>Junqua</u>, col. 5, lines 43-44), not an average likelihood difference per frame, or averaging the average likelihood difference over error words.

When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. Hodosh v. Block Drug Col, Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). "When determining the patentability of a claimed

Docket No: 042390.P8351 Page 10 of 12 TVN/tn

Appl. No. 10/019,882 Amdt. Dated August 2, 2006 Reply to Office action of April 4, 2006

invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggest the desirability, and thus the obviousness, of making the combination." In re Beattie, Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. Interconnect Planning Corp. v. Feil, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show reasons that a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPQ 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." Ex parte Clapp, 227 USPO 972, 973. (Bd.Pat.App.&Inter. 1985). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Furthermore, although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." In re-Mills 916 F.2d at 682, 16 USPQ2d at 1432; In re Fitch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992).

Therefore, Applicants believe that independent claims 1, 8, 16, and 23, and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicants respectfully request the rejection under 35 U.S.C. §103(a) be withdrawn.

Appl. No. 10/019,882

Amdt. Dated August 2, 2006

Reply to Office action of April 4, 2006

Allowable Subject Matter

Applicants note with appreciation the Examiner's indication of allowable subject matter. The Examiner objects to claims 6, 14, 21, and 29 as being dependent on a rejected base claim, but indicates that the claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, in light of the above amendments and remarks, Applicants respectfully request that independent claims 1, 8, 16, and 23, and all claims that depend therefrom be allowed.

Conclusion

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: August 2, 2006

Thinh V. Nguyer Reg. No. 42,034

Tel.: (714) 557-3800 (Pacific Coast)

12400 Wilshire Boulevard, Seventh Floor Los Angeles, California 90025

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8A)

I hereby certify that this correspondence is, on the date shown below, being:

By

MAILING

Adeposited with the United States Postal Service as first class mail in an envelope addressed to:

Commissioner for Patents, PO Box 1450,

Alexandria, VA 22313-1450.

Date: August 2, 2006

☐ transmitted by facsimile to the United States Patent

and Trademark Office.

FACSIMILE

August 2, 2006

Date

Tu Nguyeh